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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,518	06/27/2001	Robert William Dixon	STL9981/40046.155USU1	5994

23552 7590 07/02/2003

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MINNEAPOLIS, MN 55402-0903

EXAMINER

MAI, RIJUE

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/894,518

Applicant(s)  
Dixon

Examiner  
Rijue Mai

Art Unit  
2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6-9, 14-17, and 22 is/are rejected.
- 7) ☒ Claim(s) 2-5, 10-13, 18-21, 23, and 24 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jun 27, 2001 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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### DETAILED ACTION

1. Claims 1-24 are presented for examination.

#### *Claim Objections*

2. Claim 2 is objected to because of the following informalities: in claim 2, line 2, before “data stream”, “a each” should be changed to “each”. Appropriate correction is required.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 6- 9, 14-17 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamlin US pat. No. 6,499,083.

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As per claims 1, 9 and 17 Hamlin teaches a method and system for handling multiple data streams in a disc drive( see abstract, col 6, lines 46-50, col 9, lines 27-29, Figs 1, 2, comprising steps of: a) allocating a buffer size required by each data stream currently being handled ( see col 9, lines 39-47, col 11 lines 9-16); b) utilizing the buffer sizes found in allocating step a) for corresponding data streams ( col 7, lines 3-4, col 16, lines 27-67); c) when an additional data stream is to be added, reallocating the buffer size required by each data stream including the additional data stream ( see col 17, lines 1-16, col 21, line 53-col 22, line 24, Fig 19); and d) when a data stream currently being handled is to be terminated, reallocating the buffer size required by each data stream that will remain after the data stream is terminated ( see col 20, lines 34-40, lines 54-64, col 22, lines 20-38, Figs 16, 17, 19).

Referring to claims 6-8, 14-16, and 22, Hamlin further teaches the method and the disc drive further comprising : receiving, by the disc drive, one or more of the data streams ( see col 9, lines 32-35, col 11, lines 6-14); sending, by the disc drive, one or more of the data streams ( see col 9, lines 54-59); wherein a sum of the buffer sizes allocated for the data streams is less than the total size of the buffer of the disc drive ( see col 16, lines 27-43); receiving, by the disc drive, data not in a stream ( see col 9, lines 36-38); sending, by the disc drive, data not in a stream ( see col 10, lines 61-66)

***Allowable Subject Matter***

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4. Claims 2-5, 10-13, 18-21 and 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is the statement of the reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest scaling a host data rate for each data stream by an expression for a total time to fill or empty the buffer size allocated to all of the data streams being handled to create a set of simultaneous equations for the buffer sizes and solving the simultaneous equations to find the buffer size to be allocated for each data stream as claimed in claims 2-4, 10-12, 18-20 and 23-24.

The prior art fails to teach or suggest comparing a sum of the buffer size dedicated for each data stream to the total buffer size available for use and detecting whether handling of the multiple data streams at a requested host data rate and disc data rate is possible from a result of comparing step as claimed in claim 5, 13 and 21.

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Rijue Mai** whose telephone number is (703) 308-7098

The examiner can normally be reached on Monday-Thursday from 7:00 AM to 4:30 PM, and alternate Friday Eastern Time. The examiner can also be E-mailed at **Mai.Rijue@uspto.gov**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeffrey Gaffin, can be reached on (703) 308-3301.

8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Assistant Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

**Or faxed to:**

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(703) 746-7239, (for formal communications intended for entry)

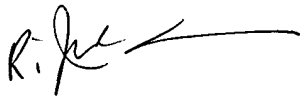
**Or:**

(703) 746-7240, (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

EXAMINER

Rijue Mai

A handwritten signature in black ink, appearing to read 'R. Mai', followed by a long horizontal stroke.

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June 24, 2003